

From left to right:

**Dr. Wesley Zheng Guangyuan**  
Scientist, Institute of Materials  
Research and Engineering (IMRE)

**Dr. Quek Boon Kiat**  
Capability Group Manager,  
Scientist, Institute of High  
Performance Computing (IHPC)

**Dr. Cheston Tan Yin Chet**  
Scientist, Institute for Infocomm  
Research (I<sup>2</sup>R)



Dr. Wesley Zheng Guangyuan,  
Dr. Quek Boon Kiat and  
Dr. Cheston Tan Yin Chet

# Worldly Inspirations

The world is your oyster, so the saying goes. A\*STAR provides many scholarship opportunities, allowing our scientists a chance to spread their wings. Find out what Dr. Wesley Zheng, Dr. Quek Boon Kiat, and Dr. Cheston Tan have learnt from the industry's greatest minds.

## Curiosity and Optimism

To study the speed of neurotransmission in the body, Dr. Wesley Zheng once immersed his hand in ice-cold water. He waited till it went numb before placing some electrodes on his palm, and then used a hammer to tap his funny bone along the elbow.

Wesley's anything-goes character has served him well when he was at Stanford University, California, USA. The A\*STAR National Science Scholarship (PhD) gave him the chance to brush shoulders with the world's most talented minds. He describes his Stanford days as the "best time of his life". The sense of optimism

“When you're young and do not yet have family commitments, that is the time to really go out and pursue your ideas.”

- Dr. Wesley Zheng



and intellectual curiosity that permeate Stanford — where any start-up can be the next Facebook or Google — have also rubbed off on him.

In Silicon Valley, those who have a string of failed businesses are given the title of “serial entrepreneurs”. This air of positivity is very refreshing for Wesley. Many of his friends have gone on to start their own companies, some while pursuing their PhD. “There is this innate desire to create something that benefits society,” Wesley says. “And it’s the same thing we want to do here at A\*STAR.”

### Making an Impact

Wesley aims to change the world with his research on lithium-sulphur (Li-S) batteries. Their predecessors are lithium-ion (Li-ion) batteries, found in products such as mobile phones. “Li-ion batteries have been around for 20 years, and hence have reached the theoretical limits of their potential,” says Wesley. “I wanted to

discover how to improve electrode materials and enhance a battery’s cycle life as well as performance.”

High-energy density and long cycle life are the hallmarks of the new Li-S batteries. Recent experiments have demonstrated that Li-S batteries can boast up to 1,500 charge and discharge cycles. Very soon, the impact of Wesley’s research may well be felt in all parts of the world. “The commercialisation of these batteries is very near. Businesses are already looking at ways to use them in electric cars and solar panels,” adds Wesley.



### DID YOU KNOW

#### Li-S Batteries Power Up the World



Provide 5X more  
theoretical energy  
density than Li-ion  
batteries



Are a low-cost option  
as compared with  
Li-ion batteries



Li-S batteries were  
used on the Zephyr,  
earning a world  
record of over 336  
hours of continuous  
unmanned flight.

Source: Sion Power’s Lithium-Sulfur Batteries Power World Record Flight. *Business Wire*.

### Inspired by Humans

The first 40 minutes of the Wall-E movie have very little dialogue. “Yet somehow, we are able to relate to the self-awareness of the robots,” says Dr. Quek Boon Kiat, a Capability Group Manager and Scientist at Institute of High Performance Computing (IHPC). “That’s because the behaviours of these robots actually mirror human emotions.” The movie struck a chord with Boon Kiat, who is a robotics aficionado. In fact, his work turns fantasy into reality. “For my PhD, I was involved in building autonomous robots that could monitor their own progress.” In short, he builds robots that can survive on their own in harsh environments such as deserts.

### Creating Human-like Robots

“I knew that in order to make some form of breakthrough, I needed to draw inspiration from how human beings behave and think.” This thinking motivated Boon Kiat to switch from the field of robotics to cognitive science and psychology. Making this transition was easy, he says. “How we model a robot’s emotions and actions draws



on the same mathematical foundation we use to model relationships between psychological constructs.”

Thanks to A\*STAR’s two-year post-doctoral scholarship programme, Boon Kiat was able to learn from leading computational psychologists like William Revelle and Andrew Ortony at Northwestern University, Chicago, USA. There, he developed an agent-based model that could mimic human performance on a psychological experiment known as the Implicit Association Test. “The model was able to simulate the pressing of left or right buttons and categorise different items. It also

“As science becomes increasingly multidisciplinary, those with a variety of backgrounds and knowledge are the ones who can think of unusual ideas to solve problems.”

- Dr. Quek Boon Kiat



made the same errors that humans would make when the nature of the task became more complicated.”

Buoyed by his experience, Boon Kiat is now developing more complex algorithms that can make human-like inferences about people’s characteristics. They can be used in areas such as human resource management, consumer behaviour understanding and social media analysis.



## SCIENCE THAT KNOWS YOU BETTER THAN YOURSELF

Many of us enjoy doing the occasional personality quiz. What if there is a way to use the psychometric data, amongst others, to benefit society? Boon Kiat and his team hope to develop computational models that can eventually understand human behaviours, preferences and choices.

The team developed a proof-of-concept system that could help volunteers understand themselves better and recommend volunteering activities that suited their personalities. This system is being piloted with the help of a few volunteer welfare organisations.

“Having a problem that you want to solve will focus your research efforts. Read newspapers, magazines as well as scientific journals and identify important global issues.”

- Dr. Cheston Tan

### Understanding the Human Mind

“What makes human beings so smart?” This question has intrigued Dr. Cheston Tan, and it inspired him to think about how to recreate human intelligence. “We’re not the strongest species nor are we the fastest. Yet our intelligence has enabled us to not only survive, but also shape our world.”

At the Institute for Infocomm Research (I<sup>2</sup>R), Cheston uses artificial intelligence (AI) techniques to create concise and meaningful summaries of daily experiences. Replaying these summaries to dementia patients can potentially help them to enhance their memories.

For his research, Cheston draws on the knowledge he acquired at Massachusetts Institute of Technology, Cambridge, USA. He worked in the Department of Brain and Cognitive Sciences, where he had a chance to collaborate with neuroscientists, psychologists and computer scientists. “Working with such a diverse team has made me a flexible thinker. I now approach problems with an open mindset.”



### Mentors and Opportunities

His biggest lesson came from Prof. Tomaso Poggio, whom he met while pursuing his A\*STAR National Science Scholarship (PhD). “Tomaso is one of my scientific heroes, and from him I learnt the importance of identifying problems that science can solve, from world hunger to energy and transport challenges.” Now, Cheston offers similar advice to aspiring researchers: do not just aim for incremental science. “The PhD journey is a very special time in that your mentors are on deck to help you. Take this time to work on risky projects that tackle huge obstacles.”

Cheston believes in making full use of his time, not just at work but during recreation as well. While in the USA, he took the opportunity to travel regularly. Beach vacations, skiing, snowboarding and even marathon training formed part of his eclectic interests. He urges those who have the opportunity to pursue overseas studies to do the same. “Explore new areas and meet new people. Start building your own network of connections.”

### Everyday Applications of AI



Choose the best vacation photographs from a collection and produce an album.



Curate Facebook and Instagram posts and create a meaningful collage of photographs, which can then be given as a memento.



Select specific clips from a movie to cut a movie trailer.

Cheston works with artificial intelligence systems that can understand and summarise details of pictures. These systems are able to handle huge volumes of data, which help us automate processes, enhance productivity and save time.



Dr. Cheok Chit Fang and  
Dr. Guo Huili

# Scientists Leading the Way

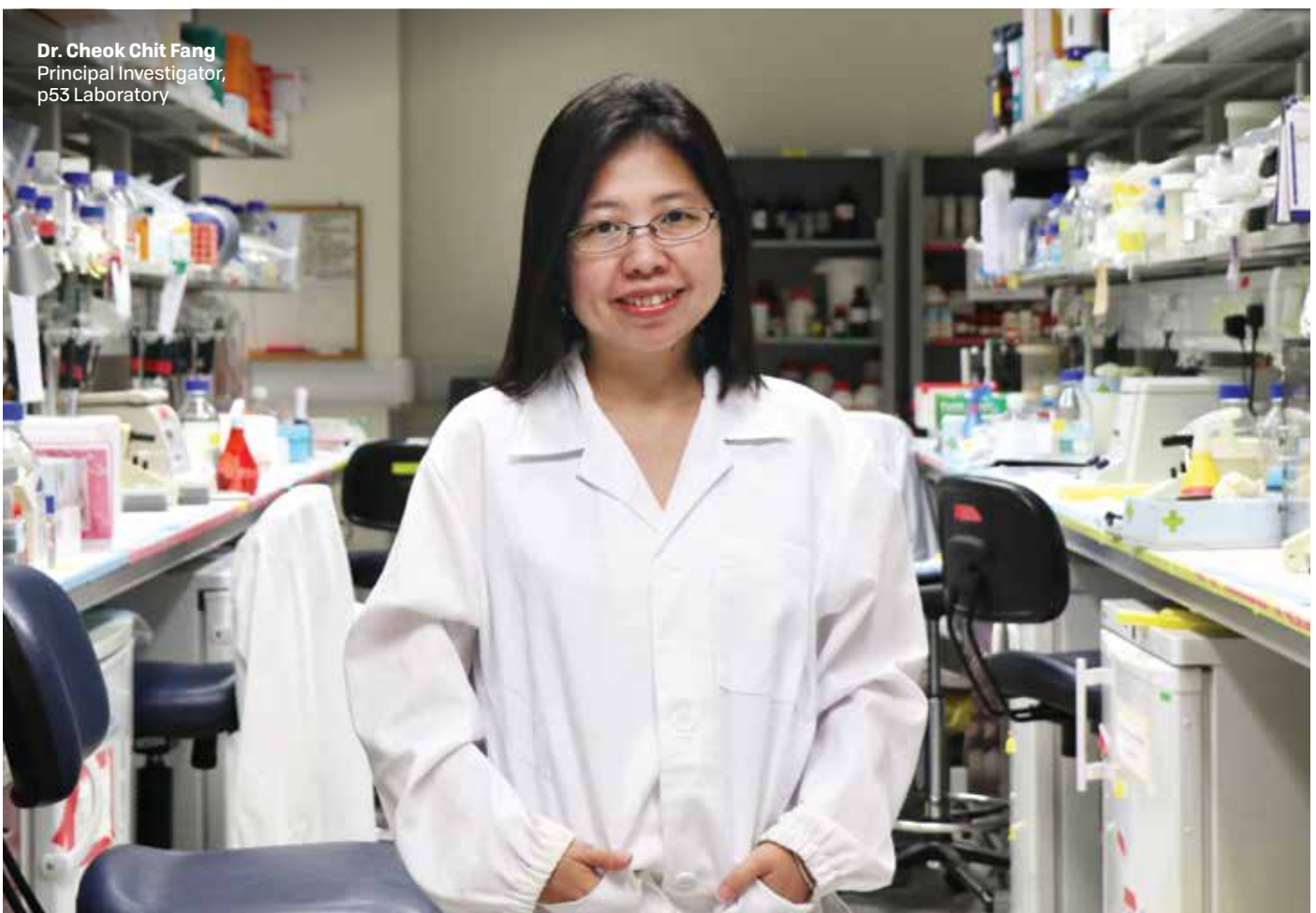
The human body is a beautiful and intricate masterpiece. It is the subject of fascination for two A\*STAR scholars: Dr. Cheok Chit Fang, a Principal Investigator at p53 Laboratory, and Dr. Guo Huili, a Junior Investigator at Institute of Molecular and Cellular Biology (IMCB). Read how their personal encounters have impelled them to push ahead and soar.

## Trying to Understand Cells

**Chit Fang (CF):** Cells are the world's cleverest engines. We invent cars and robots but we cannot replicate a single living cell. I seek to understand the biological complexities of how these trillions of cells work in our body.

**“Know what you’re good at, and believe in your capabilities.”**

**- Dr. Cheok Chit Fang**



**Dr. Cheok Chit Fang**  
Principal Investigator,  
p53 Laboratory



## FROM LAB TO REALITY – TRANSLATING RESEARCH INTO REAL-WORLD BENEFITS

Huili is interested in RNA translation. She studies ribosomes, which are cellular machines that translate information in mRNA templates into functional proteins. Here's an example of how her research could be applied.

### Problem

Male infertility

### What it is

When ribosome translation in the cells goes awry, the sperm lose their abilities to fertilise the eggs.

### Current assessment

Clinicians can only evaluate the quality of sperm samples by their appearances. Such assessments are not precise.

### Eventual goal

To come up with a diagnostic kit that can evaluate the quality of sperm cells by their molecular signatures. In turn, this can likely increase the success rate of certain assisted reproduction procedures.

“My ultimate hope is for our research to be translated into something tangible, be it an anti-viral drug or diagnostic kit.”

- Dr. Guo Huili

### Drawing Strength from Pain

**Huili (H):** Four years ago, I had a miscarriage. During recovery, I came across a paper about sperm and RNA translation. My project on male infertility was borne out of this. My miscarriage has also put things into perspective.

I can soldier on when my experiments don't go the way I intend them to.

### Instincts and Life Experiences

**CF:** Your instincts are shaped by your knowledge, experiences and interactions with different people. Trust them. Having been in the research field for 15 years, I rely on them to tell me what works and what doesn't. They also allow me to assess published papers critically.

**H:** When I was growing up, I experienced constant eczema flare-ups. I simply cannot believe there is no cure for this common condition. Finding a cure for eczema remains one of my lifelong goals.



**Dr. Guo Huili**  
Junior Investigator,  
Institute of Molecular and  
Cell Biology (IMCB)

### Between Family and Work

**CF:** When I travel for work, I keep in touch with my family via Skype. My son would sometimes cry during the chat sessions. It's difficult, but it's also part and parcel of my work. It makes me cherish the moments I have with him whenever I'm back in Singapore.

**H:** That's why it's important to find a good husband, someone who can pick up the slack when you need to be away! (laughs)

### Precious Advice to the Youth

**CF:** Embrace the opportunities to present



at conferences. Your confidence will grow when you realise the significance and potential impact of your work.

**H:** Students need not be discouraged if they only have average grades. Don't let that stop you from taking that first step of trying.

**CF:** I always say: "When brainstorming new project ideas, keep an open mind; and be very focused once you've decided on one."

**H:** Write to scientists and ask for attachment opportunities. Job shadowing allows you to learn more about their daily routines and research efforts.




## BREAKING NEW GROUND IN CANCER RESEARCH

Chit Fang's ultimate goal is to improve cancer treatments and patients' quality of life. Chit Fang and her team have discovered molecules that will change the face of cancer therapies, and they are in the process of obtaining patents for their work.



### FACTS ABOUT CANCER



Tumour suppressor proteins prevent the formation of cancer cells.



Oncogenes mutate and cause tumours to form.



DNA replication can be a driver of tumour formations.

## TRAILBLAZERS!

Leading the way in R&D



### Dr. Cheok Chit Fang

- Appointed Lead Investigator at FIRC Institute of Molecular Oncology Foundation, Milan

- Invited to key international meetings to present her team's work



### Dr. Guo Huili

- Recipient of Young Scientist Award 2016, and L'Oreal Singapore for Women In Science National Fellowship 2014

- Ambassador for Girls2Pioneers, a programme run by Singapore Committee for UN Women





Dr. Asha Shekaran

# The Collaborative Dance of Science

It is a myth that researchers only work within the confines of their laboratories. A\*STAR researchers are often seconded to organisations where they test their mettle and work on real-world industry projects. Dr. Asha Shekaran, Research Fellow, Bioprocessing Technology Institute (BTI) and ballroom dancing enthusiast, reflects on her secondment with a local SME.

Ballroom dancing teaches you about communication. In dance, one person leads and the other follows. Through a physical connection, you speak with your partner to spin, turn and hop across the dance floor together.

Much like ballroom dancing, biomedical research is a team activity.

Team members have to both lead and follow, especially when working in a start-up. We communicate with one another using the languages of science, business and medicine.

### Right Steps to Success

The stereotype of a scientist is often a solitary genius whose destined discovery appears in a dramatic



**Dr. Asha Shekaran**  
Lead Biological Scientist,  
Engine Biosciences



“The idea that we could engineer replacement tissues out of cells and materials really captured my imagination. It sparked my long-standing interest in improving healthcare.”

- Dr. Asha Shekaran



Eureka moment. But in my experience, scientists are inspired, not born. Success takes a village, or more aptly, a laboratory.

My love for research bloomed when I was at Northwestern University, Evanston, USA. The opportunity to further my studies at the prestigious university came after I received the A\*STAR National Science Scholarship (BS-PhD). There, I engineered artificial blood vessels.

Today, I hold the position of Lead Biological Scientist at Engine Biosciences, a local start-up. Its brainchild is CombiGEM, a powerful tool for rapidly discovering combination drugs for complex diseases. With it, we can study innumerable combinations of genetic elements such as CRISPR guides or miRNAs in large populations of cells.

From there, we investigate which specific combination has a desired effect, such as increasing cancer cells’

sensitivity to chemotherapy. This could potentially help patients who do not respond to chemotherapy and lack other treatment options.

### The Start-up Culture

Life in a new start-up is dynamic, fast-paced and exciting, much like ballroom dancing. There are risks in joining a start-up, but there are also pluses. You have more control and ownership of your projects. In a small team, it’s easy to build strong relationships.

I am very fortunate to work with a talented team of research officers and scientists. It’s a terrific experience working with our scientific founder Prof. Tim Lu and CEO Jeff Lu, who have immense scientific, entrepreneurial and business acumen. From them, I am learning how to apply cutting-edge science to create real-world impact.



## Dr. Asha’s Survival Guide to LIFE IN A START-UP



**“If I have 6 hours to cut down a tree, I’ll spend the first 4 sharpening my axe.”**

Prepare well for deadlines and you’ll achieve more.



**“It’s not the mountain ahead that wears you out, but the pebble in your shoe.”**

Take care of petty annoyances early so that you don’t have to drag your blistered feet up a mountain.

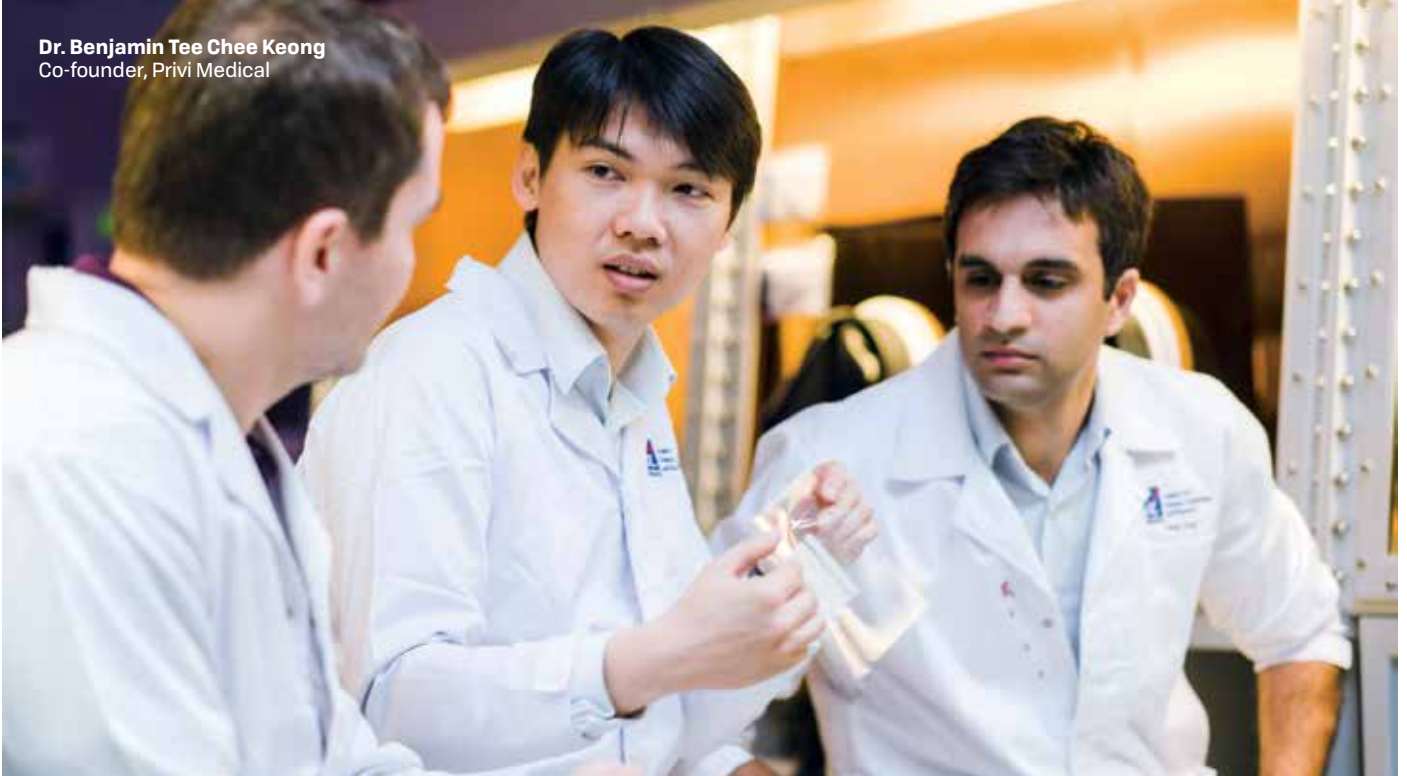


**“Go with the flow.”**

Priorities may shift quickly. Be nimble and respond to changes as they come.



**Dr. Benjamin Tee Chee Keong**  
Co-founder, Privi Medical



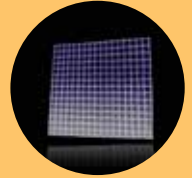
Dr. Benjamin Tee Chee Keong

# Turning Fiction into Fact

Growing up, Dr. Benjamin Tee was a huge Star Wars fan. "I was fascinated by the scene where Luke Skywalker received a prosthetic arm that's almost as functional as his real one. It could feel the prick of a needle."

The research that Benjamin undertook in Stanford University, California, USA, took a page from the epic space opera franchise. Working with a team of material scientists, engineers, physicists and biologists, he turned self-healing electronic skin (e-skin) into a reality. The e-skin is made with inexpensive plastics covered with tiny micro-particles. The atoms in the material are loosely bound. As a result, these particles adapt to mechanical damage; and they can re-associate just as easily with one another.

## ARTIFICIAL SKIN THAT HEALS IN JUST 15 SECONDS



Cut into the e-skin with a scalpel, and it will regain 90% of its conductivity within seconds and 75% of its mechanical strength within minutes. Benjamin has also developed other skin-like sensors that can detect minute changes in pressure. It can be used to detect pulse on the radial artery, measure brain pressure or increase a smartphone's screen sensitivity.

Benjamin's research has given rise to conversations on how to make artificial limbs more responsive. Eventually, they may even be able to communicate with the central nervous system and function organically like natural limbs.

See Benjamin's invention on A\*STAR TV - an info-documentary series that sheds light on how A\*STAR's research impacts society.

Watch his interview on the e-skin here:



“I hope to create a new generation of prosthetics that can mimic the capability of real skin. We can then bring renewed hope to those who have lost their limbs.”

- Dr. Benjamin Tee

This invention earned Benjamin industry recognition. In 2015, he was featured in MIT Technology Review's 35 Innovators Under 35 list.

### Becoming an Entrepreneur

Benjamin has added the title “entrepreneur” to his credentials. Besides being a Scientist at the Institute of Materials Research and Engineering (IMRE), he also co-founded Privi Medical, a local medtech start-up that focuses on gastro-intestinal medical innovations. Together with his team, he invented Privi, a

device that can alleviate pain, stop internal bleeding and help patients manage haemorrhoids.

Benjamin credits teamwork as a key ingredient for his success. “Without a great team, you’re likely to develop tunnel vision. It’s also a lot less fun starting a business alone.” Benjamin’s advice to budding entrepreneurs is to get connected with the local start-up community. “Find mentors from whom you can seek advice. Be open to failures, but do everything you can to avoid them.”



### DID YOU KNOW

Privi’s technology helps to manage haemorrhoids, a medical condition that affects millions of people.



#### Haemorrhoids

- **Grade 1:** Small swellings on the anal canal’s inside lining
- **Grade 2:** During bowel movement, the swellings may slide out of the anal canal



**300 million patients suffer from haemorrhoids globally**



**80% of all pregnant women experience symptoms of Grade 1 and 2 haemorrhoids**



**There are no effective solutions yet for Grade 1 and Grade 2 haemorrhoids**

**Sources:** Haemorrhoids (Piles). Patient Information. *Wrightington, Wigan and Leigh NHS Foundation Trust.*

Privi Medical - Helping You Manage Haemorrhoids at Home. *Biotechn.Asia.*

### DR. BENJAMIN’S WORDS OF BUSINESS WISDOM



#### Execution is your lifeblood

“You cannot make any progress if your idea remains a drawing on paper. Develop prototypes, and start collecting feedback from actual users.”

#### Iterations are important

“At Privi, we have had over 100 iterations of our product designs and business models. Always be open to new ideas.”

#### Persistence as a corporate value

“Be patient when looking for investors and securing funding. It took us six months before we managed to close our first seed funding.”

# So You Want to Be an A\*STAR Scholar...

Do all scholars start out as straight-A students? Do young scholars get a chance to make significant contributions when they join A\*STAR? Talent Times sat down with four new scholars to learn about their interests, turning points and experiences.

## What is it about science that intrigues you?

**Christine (C):** The impact of synthetic chemistry amazes me. Something as common as flu medicine actually plays a very significant role in healthcare.

**Benedict (B):** Whenever we smile, calcium reacts with other proteins in our cells to contract the muscles. I'm curious about how biological molecules perform their functions.

**Yan Han (YH):** Isn't it interesting how one drop of acid can change the pH scale of a solution? That was my earliest memory of conducting science experiments. Right now, I'm

studying Materials Science and Engineering, and I get to delve into the various engineering fields.

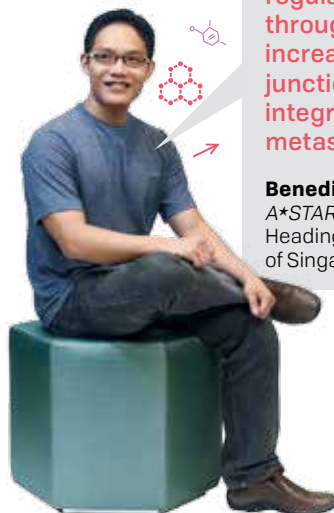
**Jacqueline (J):** I use computer software to see chemical structures at the nanoscale. During my research attachment, I had the chance to work with P&G and discover how to enhance consumer care products.

## What are some of the interesting technologies you get to use?

**B:** I'm using Correlative Light and Electron Microscopy (CLEM) to uncover the mystery of tight junctions. With it, we can see things like sub-compartmental organisations in the cells.







**"I aim to understand the molecular organisation of tight junctions. Tight junctions are protein complexes that are on epithelial cells, and they regulate the movement of solutes through the epithelial barrier. There is increasing evidence that loss of tight junctions in maintaining cell-to-cell integrity can promote invasion and metastasis of cancer cells."**

**Benedict Tan Jianwei, 26**  
*A\*STAR Graduate Scholarship (Singapore)*  
Heading to the National University of Singapore for his PhD studies



**"By examining molecular structures, I learn about the properties that make shampoos and detergents smell and clean better. One of our aims is to make manmade polymers like plastics biodegradable. More specifically, how can we make the shells encapsulating the drugs safer to consume?"**

**Jacqueline Tan Si Jia, 26**  
*National Science Scholarship (PhD)*  
Heading to Oxford University for her PhD studies

**YH:** I had the opportunity to place samples in a test chamber that accelerates corrosion effects. After a few months, we saw the effects that years of corrosion had on the samples.

#### **Tell us about your life's turning points.**

**B:** Ninety-nine per cent of my final year project was a failure. I now take the time to design better experiments and think of more checkpoints.

**J:** I actually got a big fat C for my PSLE Science examination. What I have

with science is tough love. I became unafraid to ask questions and voice my opinions. This came in useful when I minored in Physics, and I was one of two girls in a male-dominated cohort.

#### **What traits do scientists need?**

**J:** Science communication has become very important. I'm fascinated by the way TED speakers package information into bite-sized yet powerful chunks. Digital media also inspires me to think of lead-in statements to pique the interest of the audiences.



## Tips on LIVING AN ORGANISED LIFE

### Make Google Your Best Friend

"I learnt how to cook, use programming software and even write calligraphy thanks to Google. We can get answers readily from the internet, but of course there's a need to be discerning!"

- Jacqueline

### Have a Schedule of Your Work

"Time passes quickly without you knowing. Be focused about what you want to achieve and work towards your goal."

- Yan Han

### Go Beyond Grades

"Invest time in doing something you really enjoy, even if it's not in your current curriculum. Experiences matter more than grades."

- Christine

### Know Your Strengths

"Figure out what you're good at and pursue that. Don't follow trends — you will face strong competition."

- Benedict

"I look at p53, a tumour suppressor protein that regulates your cell cycle and prevents tumour growth. Its function is limited when Mdm2 binds with it, and this process leads to proteasomal degradation. I hope to find a competitive inhibitor similar to p53 to bind with Mdm2. In so doing, we can then release p53 and let it perform its original function."

**Christine Ng Sih Chin, 19**

National Science Scholarship (BS)  
Heading to Imperial College London for her Bachelor's degree

"I'm studying the effects localised corrosion has on aluminium aerospace alloys. This is an important study because we want to ensure aircraft integrity. Studies have been conducted in Europe, but given Southeast Asia's hotter climate, the material's failure mechanisms may differ."

**Liew Yan Han, 27**

A\*STAR Graduate Scholarship (Singapore)  
Heading to the National University of Singapore for his PhD studies



**C:** I agree. There is a need to know how to distil your research's technical facts into something that resonates with the public. They are the ones that your research will benefit.

**What is the one misconception that people have about what you do?**

**YH:** They think that we're always stuck in laboratories. In reality, I have the freedom to plan my own schedules. I also collaborate with different scientists from outside my field.

**Has science impacted your everyday activities?**

**C:** Science has made me question a lot more. I'd ask myself "Why can't we use this method?" I'm the same way when suggesting

fashion choices to my sister. "Why don't you bring this bag?"

**J:** I'm a very precise baker in that I follow recipes to a tee. It's comforting whenever my yeast activates — thanks to factors like right water temperature. I feel validated as a chemist (laughs).

**How has the A\*STAR scholarship helped you?**

**YH:** Besides the financial assistance, the programme

offers regular networking sessions with fellow scholars and upper management. It is through these interactions that I begin to envision how my research can benefit the world.

**B:** It has allowed me to explore my scientific interests and enter a field of my choice. It gives me the confidence to take charge of my own life and make long-term plans.



# YOUR FUTURE IS IN YOUR HANDS

Explore the diverse scholarships and career opportunities A\*STAR offers! Make an informed decision with this three-page guide!

## SECONDARY/HIGH SCHOOL EDUCATION:

### ENCOUNTER SCIENCE



Get an early start to a rewarding career. A\*STAR's array of research attachments and youth outreach development programmes will equip you with the skills and experience you need to excel as a scientist.

A\*STAR  
Science  
Award (Upper  
Secondary)

A\*STAR  
Science  
Award (Junior  
College)

A\*STAR  
Science  
Award  
(Polytechnic)

This is your time to discover the surprises science and engineering have to offer. Paint your canvas as you study and embark on research attachments alongside fellow bright minds.

National  
Science  
Scholarship  
(BS)

National  
Science  
Scholarship  
(MBBS-PhD)

A\*STAR  
Undergraduate  
Scholarship

Research  
Attachment  
for Overseas  
Singapore



## UNDERGRADUATE EDUCATION:

### BROADEN YOUR MIND

3 YEARS

## GRADUATE (PHD) EDUCATION:

### CARVE OUT YOUR NICHE

5 YEARS



Your research area will become more focused as you step into the role of a full-fledged scientist. Every step you take brings you closer to that breakthrough that will benefit society.

National  
Science  
Scholarship  
(PhD)

National  
Science  
Scholarship  
(MD-PhD)

A\*STAR  
Graduate  
Scholarship

A\*STAR-University  
of Warwick (AWP)  
EngD Partnership

Deepen your knowledge and hone your skills by working with the world's renowned luminaries. Pick their brains, elevate your calibre and then share your knowledge with your peers.

A\*STAR  
International  
Fellowship

A\*STAR  
Graduate Scholarship  
(Post-Doctoral Fellowship)



## POST-DOCTORAL EDUCATION:

### BECOME A TRAILBLAZER

2 YEARS

## SHINE BRIGHT WITH A\*STAR



18

RESEARCH  
INSTITUTES  
IN A\*STAR



1,400

SCHOLARSHIPS  
AWARDED  
SINCE 2001



600

SCHOLARS HAVE  
COMPLETED THEIR PHD AND  
POST-DOCTORAL TRAINING



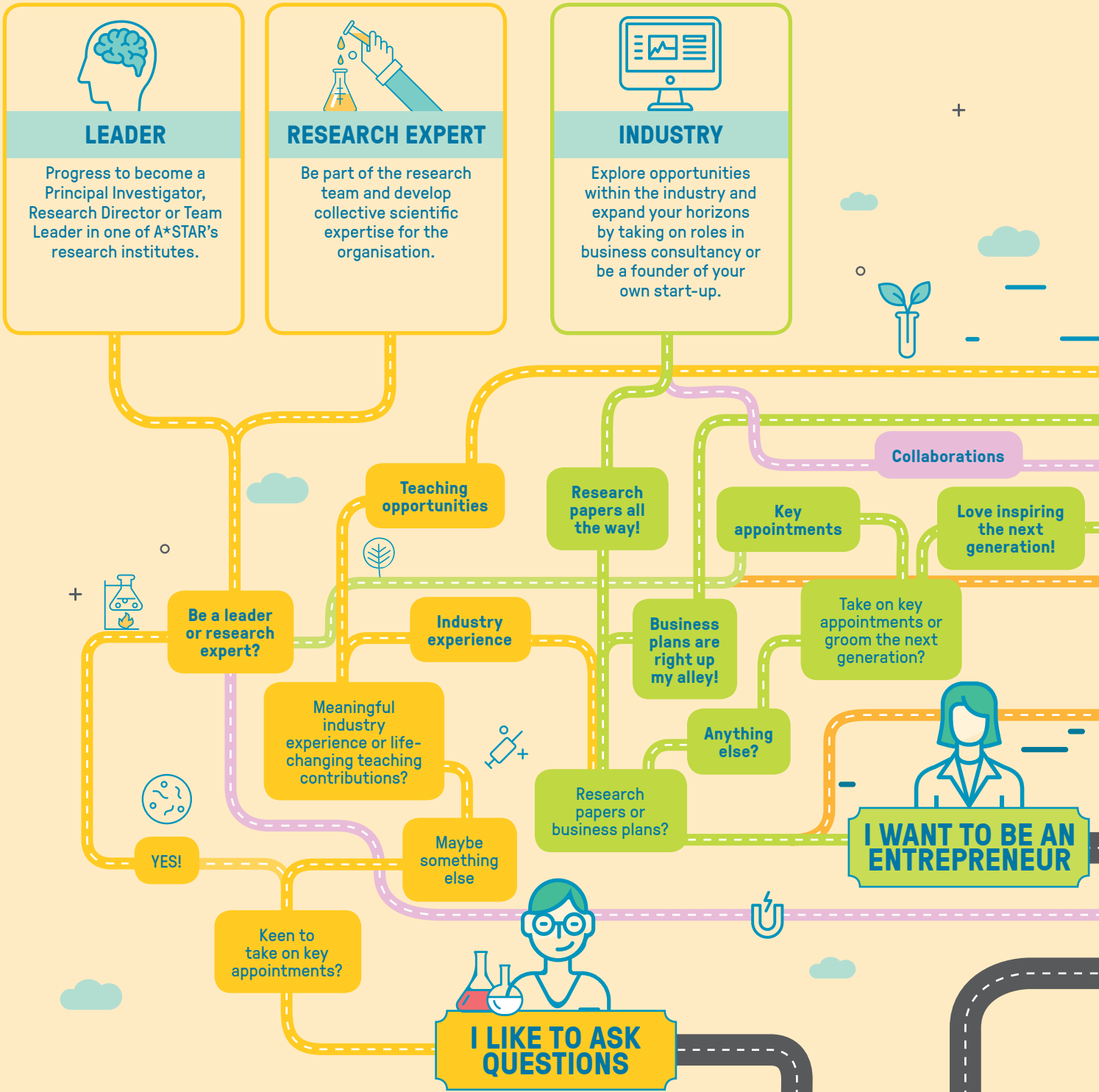
### INTERESTED TO FIND OUT MORE?

Scan the QR code and discover the multitude of scholarship opportunities.



Turn the page for the many career opportunities that await you!





# CHARTING YOUR CAREER WITH A\*STAR

Map your own destiny now! Even if you have already embarked on a career path, opportunities to cross over and gain different experiences abound.

**READY TO PURSUE A CAREER WITH A\*STAR?**

**TOTALLY!**  
Now describe yourself...




**MANAGEMENT**

Be involved in the business aspects of your field by becoming an expert in commercialisation, or seeking new business opportunities for companies.



**JOINT APPOINTMENTS**

Focus on research while contributing time to teach and supervise at the university as an Adjunct Lecturer or Professor.



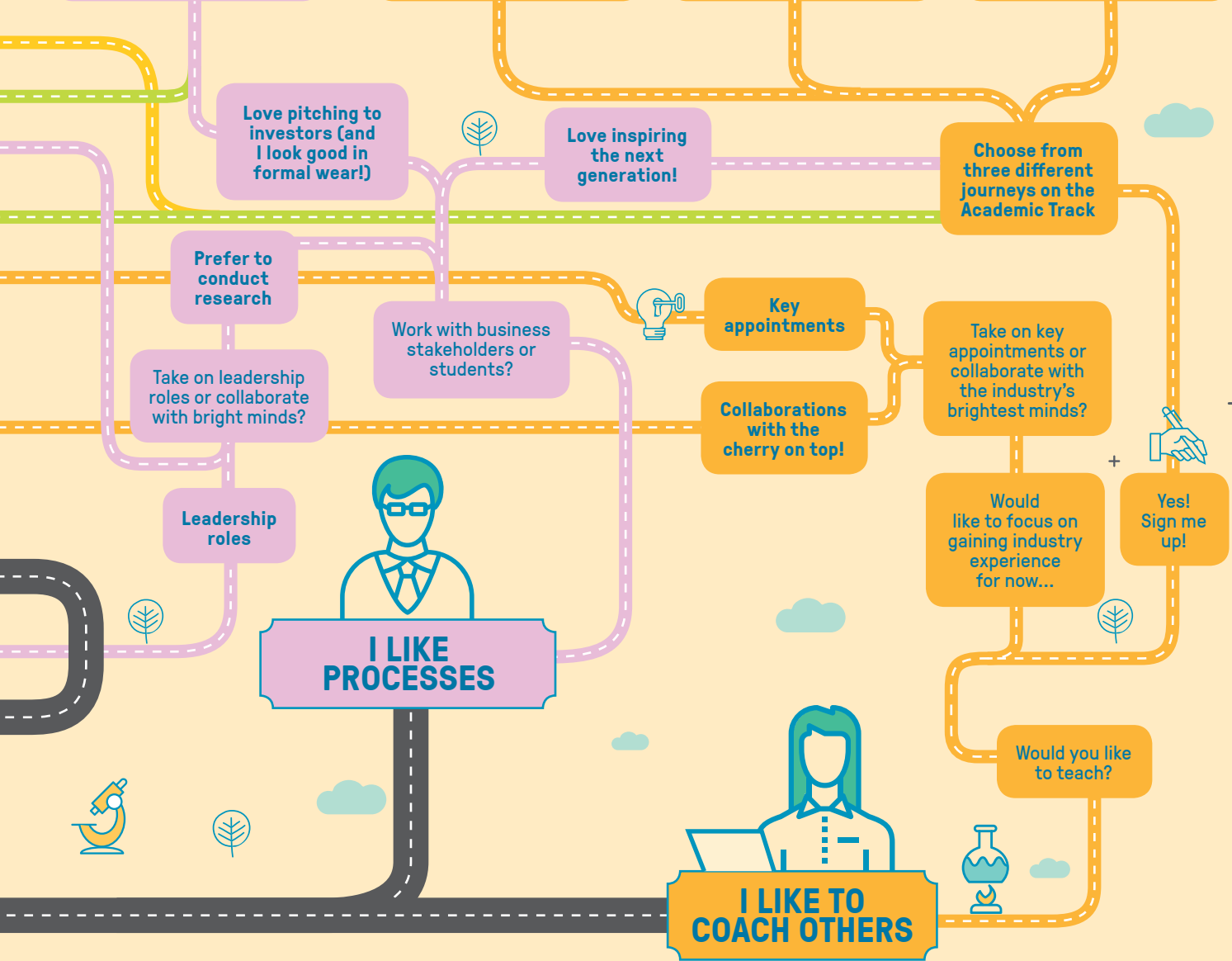
**SECONDMENT**

Relish the opportunity to be seconded to the university on the tenure track.



**ADJUNCT APPOINTMENTS**

Work with A\*STAR's research institutes and the university's faculty departments, or contribute to academia through PhD supervision and collaborations.



Read Talent Times and get inspired by the endless possibilities!

